

# Meeting Summary & Notes

## City Watersheds of Sonoma Valley: Reducing Flood Risks and Recharging Groundwater Along Fryer Creek

Wednesday, January 29, 2014

6:30 pm - 8:30 pm

Community Meeting Room (City Council Chamber)

177 First Street West, Sonoma, CA 95476

27 attendees signed in

- **Welcome and Introductions** (Kent Gylfe, Sonoma County Water Agency) Kent Gylfe welcomed a full house of community members. Each meeting participant introduced themselves with name and their interest in attending. Presenters, project partners, and Sonoma Councilmember Laurie Gallian were also introduced.
- **Project Background** (Sonoma County Supervisor Susan Gorin, 1<sup>st</sup> District)
  - Sonoma Valley currently meets more than half its water demand with local groundwater resources.
  - A 2006 USGS study of the Sonoma Valley groundwater basin found localized decline of groundwater supply.
  - To help address groundwater supplies, in 2008, the Sonoma Valley Groundwater Management Program was initiated by a broad coalition of local stakeholders and technical advisors called the Basin Advisory Panel (BAP) which was formed in 2006.
  - This panel created the Sonoma Valley Groundwater Management Plan. The *City Watersheds Project* is a direct result of this plan's goals and objectives, which included groundwater recharge coupled with stormwater management. Projects that slow, spread, and sink water into our aquifers are needed and we are working to identify and implement them.
  - To this end, the City of Sonoma, the Sonoma County Water Agency, the Sonoma Ecology Center and the Sonoma County Agricultural Preservation and Open Space District are collaborating on Fryer Creek to recharge groundwater with stormwater and help address flood risks.
  - The City Watersheds Fryer Creek Project is a multi-benefit project intended to address the risks posed by flooding and also recharge groundwater to help create resiliency in our water supply system.
  - Assuring sustainable groundwater supplies in Sonoma Valley calls for a diversified water supply approach including increased conservation, groundwater recharge, and the use of recycled water.
- **Project Overview**
  - **How project developed (Kent Gylfe, Water Agency)**
    - The City Watersheds Phase 1 project on Fryer Creek is part of a broader effort the Sonoma County Water Agency is pursuing in Sonoma Valley and other watersheds to identify multi-benefit projects that address flood hazard reduction and local water supply reliability.
    - The Water Agency has conducted scoping studies, including a Sonoma Valley study, to develop objectives and identify potential opportunities to implement multi-benefit projects.
    - In 2007, the Sonoma Valley Basin Advisory Panel (BAP) developed a Groundwater Management Plan that recommends development of stormwater management projects that enhance groundwater recharge in the Sonoma Valley, along with other additional actions such as increased water conservation and recycled water use.

- Why we're focusing on Nathanson and Fryer Creek with the City Watersheds project: Both Nathanson Creek and Fryer Creek subwatersheds represent one of the two highest priority areas for these types of projects as identified by the Sonoma Valley Stormwater Management-Groundwater Recharge Scoping Study –by virtue of the anticipated contribution of projects in this area to reducing flood risks and addressing the zone of depression in groundwater levels.
  - The Nathanson and Fryer Creek subwatersheds cover approximately 80% of the geographic area of the City of Sonoma.
  - Following completion of the Sonoma Valley scoping study in 2012, multiple watershed partners collaborated to identify an initial project. The priority of the Nathanson-Fryer subwatershed along with existing efforts and partner roles in the Fryer Creek watershed led to the development of the Phase 1 Fryer Creek project.
- **City of Sonoma flood studies (Dan Takasugi, City of Sonoma)**
  - Flooding causes problems for many residents in many locations in the Sonoma Creek watershed. The current Federal Emergency Management Agency (FEMA) floodplain mapping and the City of Sonoma Storm Drain Master Plan show areas along Fryer and Nathanson Creeks in the City of Sonoma that are at high risk of flooding during large storms. Discussed the 2 flood maps.
- **How project would work (Betty Andrews, ESA PWA)**
  - Animation of groundwater recharge project concepts (surface water collection (inflow/outlet), basin, recharge function, stormdrain system) shown
  - Presented site photos and Fryer Creek hydraulic profile
- **Project Benefits (Betty Andrews, ESA PWA)**
  - Reduced flooding and flood risk in both frequent (*e.g., 10-year*) and rare (*e.g., 100-year*) flood events: Stormwater capture and short-term detention, which reduces overloading of the stormdrain system
  - Increased recharge of groundwater: Stormwater runoff delivered to Montini wetland more often, in greater quantities and held there longer
  - Enhanced stream habitat: Sediment management, revegetation with native plants upstream of MacArthur, and
  - re-creation of flowing stream characteristics upstream of MacArthur and potential elimination of a steelhead passage barrier at MacArthur Street
  - Enhanced wetland habitat: Enlargement of wetland at Montini Open Space Preserve to increase water retention there; increased diversity in vegetation and enhanced food web support
  - Water quality improvement: Increased delivery of stormwater to enhanced wetland, which acts as a biofilter; riparian habitat enhancements assist in erosion control and providing shade to decrease sediment load and temperatures, increased flowing water at MacArthur during non-storm conditions, which increases dissolved oxygen and may reduce water temperatures.
  - Public education about stormwater management and groundwater recharge: Interpretive signage along new trail above the site
- **Project Costs (Greg Guensch, Water Agency)**
  - \$4.45M total cost, of which \$680k has already been spent on related features and \$3.77M of project costs remain
  - Grant amount = \$1.89M
- **Project Schedule (Greg Guensch, Water Agency)**
  - Project design, permitting, CEQA in 2014-15; construction in 2016
- **Hydrogeology – Initial site testing elements, monitoring goals and plan, (Jenny Cherney, DBS&A)**
  - Listed goals of investigation: characterize geology and geotechnical properties of site, support development of successful and appropriate design,

- Summarized field investigations conducted in December 2013 (borings, monitoring wells, sediment samples, infiltration testing),
  - Indicated laboratory testing of sediment samples is in progress, expect results in March.
- **Montini Open Space Preserve (Sheri Emerson, Sonoma County Agricultural Preservation and Open Space District)**
    - Goal is to develop a project in concert with the management goals and objectives of Montini Open Space Preserve. Recharging groundwater and enhancing the site's natural capability is in keeping with management plan. Final design would be subject to review and must be consistent with the management plan and terms of the conservation easement.
- **Design Concepts (Betty Andrews, ESA PWA)**
    - Presented visualizations of project concepts, and Fryer Creek hydraulic profile. For Montini, noted the potential alternatives for source water for the enhanced wetland area, as well as the outlet location; for MacArthur, noted the alternatives related to modification versus replacement and degree of potential change to the culvert slope.
- **Q&A and opportunity for public input (led by Richard Dale, Sonoma Ecology Center)**

#### Comments/Questions during Q&A

- Rosalie Drive and Arroyo Way residents have experienced flooding and concerned about flood protection in area.
- Consideration of Alternatives: a) less costly to achieve retention? b) effectiveness and lower cost of raising drop inlet?
- Sediment removal and vegetation maintenance on Sonoma Creek and its tributaries strongly urged. Residents note both activities are needed, and feel activities have ceased and/or considerably decreased therefore note dysfunction of stream flow, one of the causes of flooding, and relates to significant flooding in downtown Sonoma areas (including Nathanson Creek) and downstream in Schellville area. Residents desire money (public funds) directed towards maintenance (throughout the watershed).
- Need to see a cost-benefit analysis. Is \$4,000,000 project worth the money in terms of benefits?
- Project benefits- with project: What is the percent reduction in flows? What is the true flood hazard reduction? What is the localized benefit and benefit to watershed?
- Question the compatibility of the detention project on natural area and that of consistency with the Montini Open Space Preserve conservation easement.
- Impact of mosquitoes?
- Concern of residents on impacts to views of open space. Resident noticed the property aesthetics have changed over the years. One glaring impact is that of the proliferation of banners and signs hung on fence along 5<sup>th</sup> Street West.
- Concern of Montini Way neighbors of flood back-up and possible flooding due to design or basin malfunction. Concern about diverting stormwaters in vicinity and if existing berm will provide sufficient protection.
- Concern regarding increased urban growth and affect on flooding and stormwater management.
- Manor Lane residents noted existence of trash and debris in Fryer Creek, near MacArthur Street bridge.
- MacArthur area resident noted care and concern for ducks and stream habitat.